

## **CLAIMS**

### **What is Claimed is:**

- 5    1.    Method for painting plastic substrates, comprising the steps:
1. applying a pigmented paint layer consisting of a colour- and/or effect-imparting coating composition directly to the plastic substrate and
2. curing the pigmented paint layer thus obtained,
- wherein the applied colour- and/or effect-imparting coating
- 10   composition comprises
- A) 30 to 90% by weight of a conventional colour- and/or effect-imparting coating composition, comprising
- Aa) at least one binder,
- Ab) at least one colour and/or effect pigment,
- 15           Ac) at least one organic solvent and/or water and
- Ad) optionally conventional paint additives and
- B) 10 to 70% by weight of an adhesion-promoting composition, comprising
- Ba) at least one ethylene vinyl acetate copolymer,
- 20           Bb) at least one chlorinated rubber,
- Bc) at least one chlorinated polyolefin and
- Bd) optionally organic solvents and/or water and conventional paint additives,
- wherein the sum of the portions of components A) and B) makes up
- 25   100% by weight.
2.    Method according to claim 1, comprising the steps:
1. applying a base coat layer consisting of a colour-and/or effect-imparting base coat directly to the plastic substrate,
- 30           2. evaporating and/or curing the base coat layer thus obtained,
3. applying a clear coat layer consisting of a transparent clear coat to the base coat layer obtained,

4. curing the clear coat layer obtained, optionally together with the base coat,  
wherein the applied colour- and/or effect-imparting base coat comprises
- 5       A) 30 to 90% by weight of a conventional base coat composition, comprising
- Aa) at least one binder,
- Ab) at least one colour and/or effect pigment,
- Ac) at least one organic solvent and/or water and
- 10       Ad) optionally conventional paint additives and
- B) 10 to 70% by weight of the adhesion-promoting composition B), wherein the sum of the portions of components A) and B) makes up 100% by weight.
- 15    3. Method according to claim 1, comprising the steps:
1. applying a pigmented monocoat finish layer consisting of a colour- and/or effect-imparting coating composition directly to the plastic substrate and
2. curing the top coat layer thus obtained,
- 20       wherein the applied colour- and/or effect-imparting monocoat finish comprises
- A) 30 to 90% of a conventional monocoat finish composition, comprising
- Aa) at least one binder,
- 25       Ab) at least one colour and/or effect pigment,
- Ac) at least one organic solvent and/or water and
- Ad) optionally conventional paint additives and
- B) 10 to 70% by weight of the adhesion-promoting composition B),
- 30       wherein the sum of the portions of components A) and B) makes up 100% by weight.

4. Method according to claim 1, wherein the colour- and/or effect-imparting coating composition comprises 35 to 80% by weight of the conventional colour- and/or effect-imparting coating composition A) and 20 to 65% by weight of the adhesion-promoting composition B), wherein the  
5 sum of portions of components A) and B) makes up 100% by weight.

5. Method according to claim 1, wherein the colour- and/or effect-imparting coating composition comprises 40 to 70% by weight of the conventional colour- and/or effect-imparting coating composition  
10 constitution A) and 30 to 60% by weight of the adhesion-promoting composition B), wherein the sum of portions of components A) and B) makes up 100% by weight.

6. Method according to claim 1, wherein the adhesion-promoting  
15 composition B) comprises  
Ba) 1.0 to 10.0% by weight of at least one ethylene vinyl acetate copolymer,  
Bb) 0.5 to 10.0% by weight of at least one chlorinated rubber,  
Bc) 1.0 to 10.0% by weight of at least one chlorinated polyolefin  
20 and  
Bd) 70.0 to 97.5% by weight of organic solvent and optionally, conventional paint additives, wherein the sum of the portions of components Ba) to Bd) makes up 100% by weight.

25 7. Method according to claim 1, wherein the step of applying the pigmented paint layer consisting of a colour- and/or effect-imparting coating composition is carried out in that a colour- and/or effect-imparting coating composition containing the adhesion-promoting composition B) is applied directly to the plastic substrate and a colour- and/or effect-  
30 imparting coating composition which does not contain the adhesion-promoting composition B) is then applied thereon.

8. Method according to claim 1, wherein the colour- and/or effect-imparting coating composition is a solvent-based coating composition.
9. Method according to claim 1, wherein the colour- and/or effect-imparting coating composition is a water-based coating composition.
10. Method according to claim 1 for painting plastics in vehicle painting.
11. A plastic substrate coated according to the process of claim 1.